This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

Claims 1-9. Cancelled.

10. (New) A vertebral anchoring device, comprising:

a polyaxial anchoring screw having a spherical head opposite a screwthreaded body and configured for being anchored within a vertebral body;

a connecting rod;

a connector configured for receiving the connecting rod and configured for being installed on the spherical head of the anchoring screw, the connector comprising:

a socket having external threads and a ring each being configured to co-act with one other about the spherical head of the screw in an installed orientation in which the ring is disposed on the socket above the spherical head nd the socket is connected in a vertical direction to the spherical head but remains free in rotation and in pivotal angular movement about the spherical head, wherein the socket includes two portions bridged together so that the two portions are positionable in a spaced apart orientation to enable the socket to be installed on the spherical head and thereafter the two portions are positionable together about the spherical head to connect the socket to the spherical head and provide the installed orientation;

a connection element comprising a pair of vertical branches delimiting a U-shaped opening for receiving portions of the connecting rod, a threaded central bore located at the bottom of the U-shaped opening and extending through the connection element and being configured to receive the ring and threadably receive the external threads of the socket after the socket has been installed on the spherical head of the screw; and

a clip positionable to abut portions of the vertical branches of the connection element and including a pressure screw positionable to engage the connecting rod when the connecting rod is received by the connection element, wherein pressure of the pressure screw against the connecting rod bears the connecting rod against the ring which bears the ring against the spherical head of the screw.

- 11. (New) The device of claim 10, wherein the central bore comprises the bottom of the U-shaped opening and includes an internal shoulder.
- 12. (New) The device of claim 10, wherein the screw threaded body has threads having a diameter greater than the diameter of the spherical head.
- 13. (New) The device of claim 10, wherein the ring comprises a cylindrical portion having a collar.
- 14. (New) The device of claim 10, wherein the socket includes a spherical bearing surface for engaging the spherical head.
- 15. (New) The device of claim 10, wherein the socket includes two opposite slots partially cutting the length of the socket into two separate portions.
- 16. (New) The device of claim 15, wherein the two separate portions are connected by a bridge which allows the separate portions to be positioned relative to one another between a spaced apart position and a together position.